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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/579,209 | 05/12/2006 | Toshiharu Taguchi | 290311US0PCT | 6655 |
| 22850 | 7590 | 01/08/2009 | | |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | EXAMINER SULLIVAN, DANIELLE D | |
| | | | ART UNIT 1616 | PAPER NUMBER |
| | | | NOTIFICATION DATE 01/08/2009 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/579,209 | Applicant(s) TAGUCHI ET AL. | |
| | Examiner DANIELLE SULLIVAN | Art Unit 1616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 4-13 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-15 are pending. Claims 1-3 and 14 are presented for examination on the merits as they read upon the elected subject matter. Claims 4-13 and 15 are withdrawn from consideration as being drawn to non-elected subject matter.

Withdrawn rejections

Applicant's amendments and arguments filed 10/15/2008 are acknowledged and have been fully considered. Any rejection and/or objection not specifically addressed below are herein withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (JP 09201424) in view of Kekish et al. (US 4,428,310).

Applicant's Invention

Applicant claims a deodorant comprising powder of an amine salt of a phosphorus inorganic acid, the powder having an average particle diameter of 5 to 20 microns. Claim 2 limits the amine salt to an ammonium salt.

Determination of the scope and the content of the prior art

(MPEP 2141.01)

Ito et al. teach a fire extinguishing agent comprising a mixed powder of mainly ammonium dihydrogen phosphate and ammonium sulfate having diameters ranging 1.5 to 53 microns (abstract).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Ito et al. do not specifically teach the average particle diameter of ammonium dihydrogen phosphate ranges from 5 to 20 microns. However, Ito et al. teach that the mixture of ammonium dihydrogen phosphate and ammonium sulfate falls within this range. It is for this reason that Kekish et al. is joined.

Kekish et al. teach a finely divided powder of aluminum phosphate containing particle sizes under about 20 microns (Example D, column 6, lines 58-64).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ito et al. and Kekish et al. to utilize phosphates

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containing particles ranging from 5 to 20 microns. One would have been motivated to manipulate ranges during routine experimentation to discover the optimum or workable range since Kekish et al. teach particle sizes under about 20 microns e.

Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (JP 09201424) in view of Kekish et al. (US 4,428,310) and in further view of Pearson (US 4,552,803).

Applicant's Invention

Applicant claim the composition as addressed in above 103(a) rejection. Claim 3 further defines a deodorant product comprising the composition. Claim 14 defines a plywood board comprising the composition.

Determination of the scope and the content of the prior art

(MPEP 2141.01)

The teachings of Ito et al. and Kekish et al. are addressed in above 103(a) rejection.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Ito et al. and Kekish et al. do not teach a deodorant product or that the composition is used on plywood. It is for this reason that Pearson is joined.

Pearson teaches a fire-retardant powder which does not have objectionable odors (deodorant) (column 1, lines 49-51). The powder comprises ammonium phosphate (column 2, lines 1-12). The invention is incorporated in making plywood and

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particle board to protect against fire hazard problems (column 1, lines 35-40; column 4, lines 34-37). The powder may be reduced in size by grinding (column 4, lines 8 and 9).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Pearson, Kekish et al. and Ito et al. to incorporate the formulate a deodorant. One would have been motivated to formulate a deodorant because Pearson teaches the use of ammonium phosphate in fire-retardants which do not have objectionable odors.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Pearson, Kekish et al. and Ito et al. to incorporate the composition onto plywood board. One would have been motivated to treat plywood with the composition because Pearson teaches impregnating plywood with fire resistant powders comprising ammonium phosphate prevent fire hazard problems.

Response to Arguments

Applicant's arguments filed 10/15/2008 have been fully considered but they are not persuasive.

Applicants argue that Ito et al. inevitably contains larger particles (53um or 38um) in a significantly greater amount than the particles of the smaller size 20um. Therefore, Applicants argue that the powder taught by Ito et al. cannot be 5um to 20 um. The Examiner disagrees with this viewpoint. The powder taught by Ito et al. contains a

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distribution of particle sizes and include the presence of particles that are ammonium sulfate. The mixture of particles covers a range of diameters which are encompassed by the teachings of Ito et al. and Kekish et al, including 5-20 um. Kekish et al. teach finely divided particles of phosphate range from 20 micron or less (Example D). Therefore, formulating a powder having particles ranging from 5 to 20 microns is obvious subject matter.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danielle Sullivan whose telephone number is (571) 270-3285. The examiner can normally be reached on 7:30 AM - 5:00 PM Mon-Thur EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Danielle Sullivan
Patent Examiner
Art Unit 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616